USDA United States Department of Agriculture

The Year in Forestry

State and Private Forestry in the Northeast and Midwest Fiscal Year 2013

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(USFS archives)

A Message From the Director

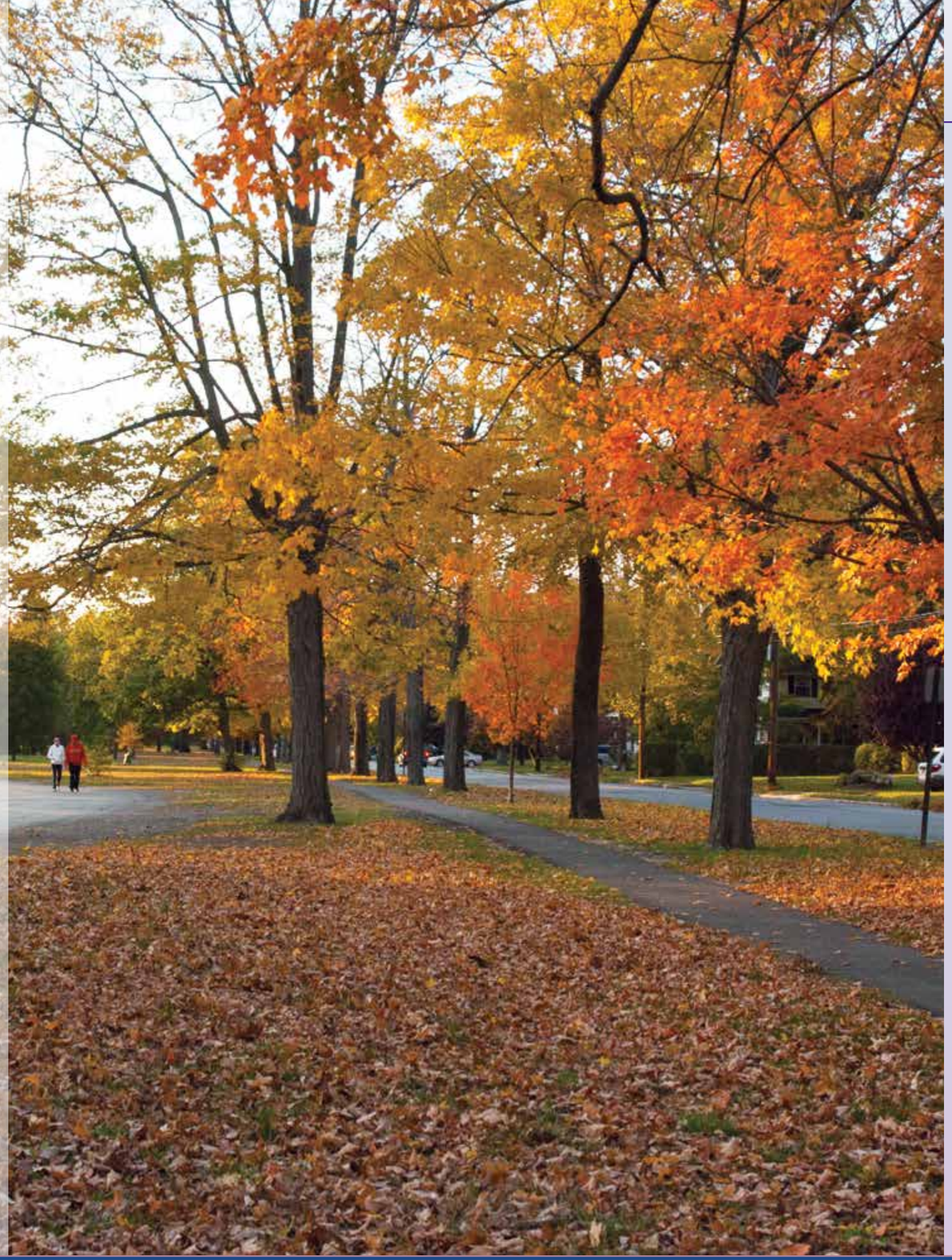
I am pleased to introduce the U.S. Forest Service Northeastern Area State and Private Forestry Annual Report for Fiscal Year 2013. Our service area includes the 20 Northeastern and Midwestern States and the District of Columbia. We work in partnership with diverse organizations, especially States, to protect, conserve, and manage forests and community trees.

Fiscal Year 2013 presented its share of challenges. I encourage you to read on to learn more about the forests of the Northeast and Midwest and our activities during Fiscal Year 2013.

Sincerely,

Tony L. Ferguson

Tony Ferguson
Area Director

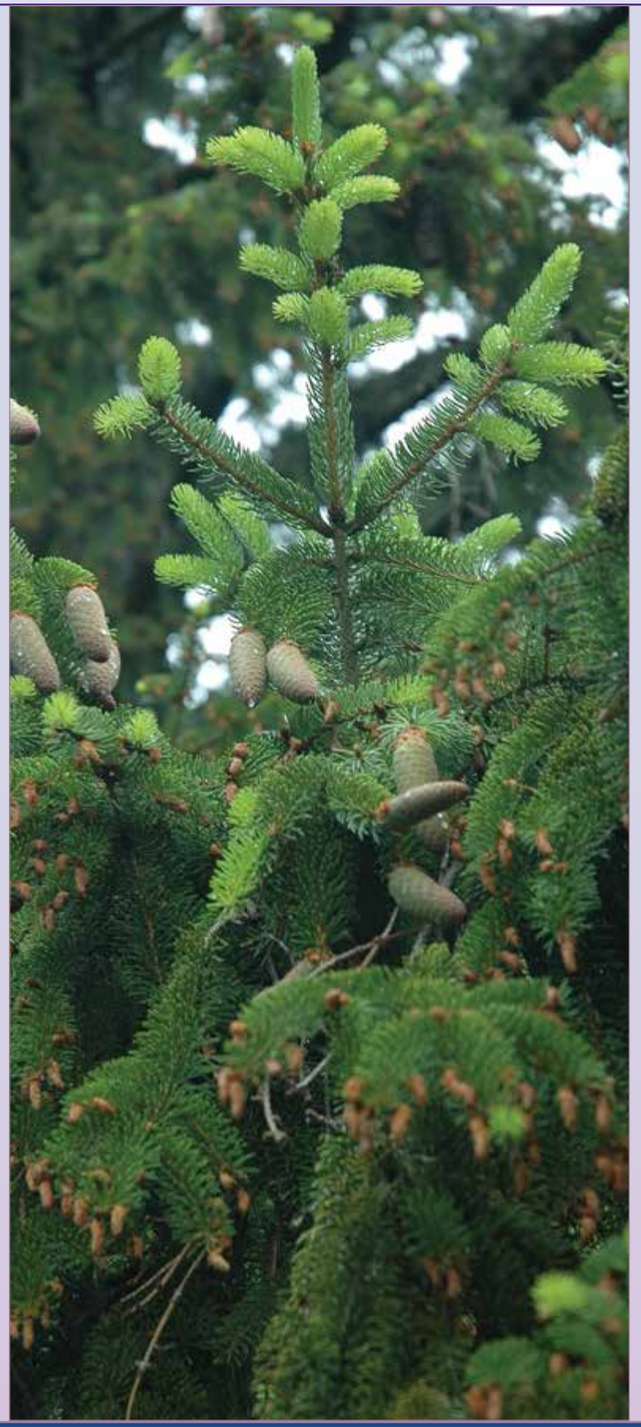


The People and Forests of the Northeastern Area

The 20 Northeastern and Midwestern States and the District of Columbia are fortunate to have abundant forests and community trees. Trees are vital to people's health and quality of life. They provide environmental services such as mitigating temperature extremes and managing stormwater. They are an important part of the region's economy, employing thousands across the region. These values simply cannot be replaced.

Private landowners, many of them individuals and families, hold 74 percent of the region's forest land. Collectively, they significantly influence the overall health and vitality of our region's natural resources. Reaching owners with information about sustainably managing forest land is critical.

Our service area has 9 of the Nation's 10 States with the highest population density. More than 125 million people live in the Northeast, Upper Midwest, and the District of Columbia. We face a growing challenge in meeting the needs of a growing populace while maintaining an abundance of healthy forests.



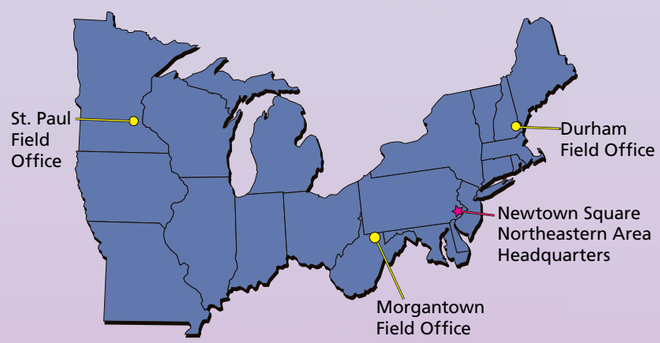
About Us

The Northeastern Area State and Private Forestry, part of the U.S. Department of Agriculture Forest Service, helps sustain non-Federal forests. We also help with forest health-related issues on national forests and other Federal lands. We provide technical assistance and targeted funds in partnership with States and other organizations, often across political boundaries and large blocks of land. We offer programs that help States, communities, landowners, and forest-related businesses:

- Monitor and protect forest health
- Help landowners sustainably manage their forest resources
- Protect forest land from conversion to nonforest uses
- Work across watersheds to protect and improve water quality using sound forest practices
- Produce and use forest products efficiently and sustainably
- Improve forest-related benefits and quality of life in cities and smaller communities
- Protect communities, lives, and property from wildfires
- Provide educational materials to the public and to youth, the conservation leaders of tomorrow

Our legislative authority comes primarily from the Cooperative Forestry Assistance Act. To qualify for our programs, the Farm Bill requires States to develop State Forest Resource Assessments and Action Plans. Participation is voluntary. All 20 States in our service area and the District of Columbia actively participate in our programs.

The Northeastern Area headquarters is in Newtown Square, PA, with field offices in Durham, NH; Morgantown, WV; and St. Paul, MN.



The Strategic Plan

With the help of employees and partners, we completed a new strategic plan for Fiscal Years 2013–2018.

Our ***Mission Statement*** defines our purpose:

The Northeastern Area State and Private Forestry collaborates with States, other Federal agencies, tribes, landowners, and other partners to protect, conserve, and manage forests and community trees across the 20 Northeastern and Midwestern States and the District of Columbia. We provide leadership, technical support, sound science, and financial assistance to help ensure that our forests and trees continue to provide clean water, forest products, wildlife habitat, recreation, and other benefits for present and future generations.

Our ***Objectives*** mirror Forest Service priority areas and address our specific mission:

- *Protect forests from threats*
- *Conserve and manage working forest landscapes for multiple values and uses*
- *Enhance public benefits from trees and forests*
- *Organizational effectiveness*

The strategic plan includes **Core Commitments** to:

- *Civil Rights and Diversity:* We foster a climate of inclusiveness.
- *Safety:* We ensure employee safety and welfare.
- *Sustainable Operations:* We work to reduce our environmental footprint.

Highlights from Fiscal Year 2013

This section features some of our Fiscal Year 2013 activities.

Objective: Protect Forests from Threats

Forests are exposed to pests, extreme weather, wildfires, and pollution. From 2006 to 2010, insects and diseases alone damaged an average of 8.3 million acres of Northeast and Midwest forests annually.[1] While stressors cannot always be prevented, swift action can limit their impact.

The loss of forest land to other uses is also a major threat to environmental and economic health. Urban expansion is expected to consume 1.5 million acres of forest land per decade for the foreseeable future.

Monitoring Forest Conditions and Threats

Forest Health Protection Program

We provide technical support and cost-share funds to assess, monitor, and combat forest threats. Our specialists serve States, national forests, other Federal lands, and tribal lands. We serve private lands via partnerships with State forestry or agriculture agencies. The Northeastern Area also supports the lead Federal and State plant pest regulatory agencies. We also develop tools and technology to manage invasive pests and their impacts.

Keeping a watchful eye for forest health problems is an important part of our job. In Fiscal Year 2013, we surveyed 220 million acres for forest health issues, either from the air or on the ground.

(USFS archives)

Asian longhorned beetle (***ALB***) kills both urban and forest trees. After years of work by Federal, State, and local agencies, ALB was eliminated from parts of New York and New Jersey. We are actively battling ALB on several fronts:

- Worcester, MA, is the center of a major outbreak. Since ALB appeared, cooperators have treated or removed 234,000 trees and planted 16,000 replacement trees. In Fiscal Year 2013, we helped place 1,000 traps in high-risk areas.
- Specialists found 281 infested trees in Amityville, NY. Ohio removed more than 22,000 infested and high-risk trees from four areas.
- We are assisting with an ALB artificial trap study at Penn State to improve ALB survey methods.
- We completed a Spanish version of Asian Longhorned Beetle and its Host Trees, which is available in hard copy and on our ALB Web page. The Spanish version is at http://na.fs.fed.us/pubs/detail.cfm?id=2517.
- We studied ALB colonization of maples. Our results were published in the journal *Insects*.

[1] U.S. Department of Agriculture, Forest Service, Forest Health Technology Enterprise Team. 2011. Forest Health Protection Mapping and Reporting [Online Database]. http://www.foresthealth.info. (9 September 2011).

Emerald ash borer **(*EAB*)** is an Asian insect that has killed millions of trees in Michigan, Indiana, Ohio, Illinois, and beyond. Thousands of trees have been removed to halt outbreaks. We:

- Sponsored the *Emerald Ash Borer University* Webinar series with Purdue, Ohio State, and Michigan State Universities. The series will continue in 2014.
- Supported the national EAB Web portal, http://www.emeraldashborer.info. We also worked with Michigan State University to produce and nationally distribute EAB display kits. We printed and distributed information on early detection.
- Provided Redesign funds to the Pennsylvania Bureau of Forestry for surveys and to help at-risk communities develop EAB plans.
- Helped collect ash seed for preservation and supported evaluations of possible resistance in native ash trees.
- Helped the Department of Veterans Affairs treat EAB at the National Cemetery at Fort Snelling, Minnesota.

Human Health Linked to Trees? *When the emerald ash borer comes to town, treeless streets are often the result. New U.S. Forest Service research published in the American Journal of Preventive Medicine found that people who live in infested areas in counties across 15 States suffered an additional 15,000 deaths from cardiovascular disease and 6,100 more deaths from lower respiratory disease when compared to uninfested areas.*[2]

Gypsy moth caterpillars eat leaves, eventually killing the tree. This pest occurs in19 Eastern States. The National Gypsy Moth *Slow the Spread* program has cut the insect's spread by 60 percent, saving landowners and taxpayers millions of dollars. We:

- Treated more than 461,000 acres of Federal, State, and private lands in several States.
- Placed 50,000 monitoring traps.
- Standardized data collection, planning, and evaluation.

Hemlock woolly adelgid **(*HWA*)** is an Asian insect that kills hemlock trees, which are important for wildlife, wood products, and ornamental uses. HWA has infested half of hemlock's Eastern United States range and continues to spread. It has already had an economic impact on some nurseries and wood product businesses. In Fiscal Year 2013 we:

- Assisted Federal, State, and tribal land managers in 12 States
- Monitored HWA spread along the edge of infested areas
- Released HWA predators in nine States
- Collected predatory beetles to rear in the lab for eventual release
- Completed a Hemlock Woolly Adelgid Strategic Plan to coordinate the actions of agencies and cooperators. The National Association of State Foresters and the National Plant Board provide support and assistance.

[2] Abstract located at www.ncbi.nlm.nih.gov/pubmed/23332329.

Oak wilt has killed millions of trees from Pennsylvania to Minnesota, south to Texas and South Carolina since the 1950s. We work to prevent new disease centers and to control the spread of existing centers:

- Developed a diagnostic aid and a new control method to use with existing techniques.
- Treated valuable red oaks on the Chequamegon/Nicolet and Huron/Manistee National Forests.
- Continued control activities on private and State lands in Michigan and western Pennsylvania.

Southern pine beetle **(*SPB*)** kills pine trees. Dead and dying trees are hazardous and raise the risk of wildfires. SPB has infested 38,400 acres in New Jersey since 2001. We are part of a State and Federal advisory group that assists the State with management actions. New Jersey treated 208 acres in Fiscal Year 2013. With Federal assistance, the State also:

- Met with affected communities to share information and encourage them to apply for grants and cost-share funds.
- Maintains a Web site at www.southernpinebeetle.nj.gov.
- Continued a cost-share program, funded by Northeastern Area Redesign funds, to help private landowners with suppression. The New Jersey Forestry Association administers the program.

Thousand cankers disease of black walnut **(*TCD*)** is caused by the combined effects of a beetle and a fungus that it carries. It kills eastern black walnut trees, a very valuable species. The disease occurs at two sites in our service area: Bucks County, Pennsylvania, and southwest Ohio. To combat the disease, we:

- Continued detection surveys and improved the beetle lure and trap.
- Removed infested trees and debris in Pennsylvania.
- Hosted Webinars with Purdue University and the Walnut Council that reached more than 500 participants nationwide.
- Updated the national Pest Alert.
- Began walnut resistance trials with the U.S. Forest Service Northern Research Station.

White Pine Health: Aerial surveys showed damaged white pines on 76,000 acres in Maine, Massachusetts, New Hampshire, and Vermont. Several causes were found. We are working with the University of New Hampshire, University of Maine, and specialists from the northern New England States to assess the long-term impact on tree health and to identify climate conditions that can lead to pest epidemics. We completed, printed, and distributed a Pest Alert for resource managers.

White pine blister rust, *a long-standing threat to pines and agricultural products, is on the upswing. Gooseberry plants host a fungus that kills white pines. For decades, a Federal quarantine prohibited the planting of gooseberries, but it was lifted after plant breeders developed disease-resistant varieties. Now, at least some of that resistance has failed. A New Hampshire Division of Forests and Lands survey found widespread evidence of disease in once-resistant cultivated gooseberries. The State removed suspect varieties from its approved planting list and began consultations with Cornell University and the Canadian Forest Service. We are working with specialists in vulnerable States to investigate the problem and take appropriate action.*

Top: Aecial spore stage of white pine blister rust on main stem of small tree (Steven Katovich; USDA Forest Service; Bugwood.org) Bottom: Greenhouse trials for white pine blister rust screening. (Joseph O'Brien; USDA Forest Service; Bugwood.org)

Top: Large patch of flowering garlic mustard (Steven Katovich; USFS; Bugwood.org) Left: Winter moth larvae on European Beech leaf (Louis-Michel Nageleisen, Département de la Santé des Forêts, Bugwood.org)

The Minnesota Department of Natural Resources *PlayCleanGo* *media campaign and Web site are aimed at reducing the spread of forest pests and invasive plants. They urge forest recreationists to inspect their clothing and gear to remove hitchhiking insects, diseases, and plants.*

Winter moth is a European insect that strips the leaves from trees, eventually killing them. It infests sites in Connecticut, Massachusetts, New Hampshire, New York, Rhode Island, and, most recently, along the coast of Maine. We:

- Bred and released parasitic flies to help control the moth, most recently in Maine.
- Helped set up monitoring plots to assess the moth's impact and to see whether the parasitic fly is working. The flies are indeed reducing moth populations in Massachusetts.
- Cooperated with APHIS to support the winter moth biological control program at the University of Massachusetts and work on a joint 3- to 5-year biological control plan.

Invasive Plants can crowd out native species. They deprive wildlife of food and shelter, interfere with human uses, and reduce other forest benefits. We emphasize biological controls.

- Rhode Island nearly eliminated a major infestation of *Japanese stiltgrass* in 3 years by fencing out white-tailed deer. Native plants outcompeted the stiltgrass and thrived.
- In West Virginia, crews from the Potomac Highlands Cooperative Weed and Pest Management Area treated 185 acres. Volunteers, including students, contributed a total of 575 hours at the annual Garlic Mustard Pull, removing 34,572 pounds of the weed.

Protecting Important Forests

Forest Legacy Program

We work with States and other groups, such as land trusts, to identify and permanently protect important forests. Woodlands with outstanding scenery, recreation, timber, or wildlife, or those that protect water, are the top priority. Forests must be sustainably managed. Most lands are protected with conservation easements. All 20 States in our service area participate in the Forest Legacy Program.

Forest Legacy Accomplishments for Fiscal Year 2013

Tracts Protected	Acres Protected	Forest Legacy Program Funds	Cost Share Funds	Total Cost
14	50,283	$21.5 million	$9.8 million	$31.3 million

Highlights of this year's program include:

- ***Illinois*** is updating its State Assessment of Need, originally published in 1994. It is likely to add new Forest Legacy Areas based on priority lands identified in the State's 2010 Forest Action Plan.
- ***West Grand Lake Community Forest, Maine***: A 21,870-acre working forest conservation easement lies in the heart of Washington County's Downeast lakes region. The project protects 16 miles of shoreline on West Grand Lake and a portion of Grand Lake Stream, a fabled fly-fishing destination.
- ***Smoke Hole One, West Virginia***: A conservation easement now protects a 378-acre forest next to the Monogahela National Forest in the Potomac River Watershed. The forest helps protect drinking water for Washington, DC, and improves water quality in the Chesapeake Bay.
- ***Crisp Point, Michigan***: The purchase of 3,810 acres protects more than 2 miles of Lake Superior shoreline and important forest. The land provides habitat for endangered species and other animals. The public has full recreational access.

Reducing Wildfire Threats and Improving Preparedness

Cooperative Fire Protection Program

In 2013, the Northeastern and Midwest States reported 6,393 wildfires that burned 53,380 acres.

Given that 41 million residents live in our service area, nearly every wildfire affects people. One-third of the population lives in the *wildland-urban interface* (WUI), the area where development and forests intermix. Lives and property are at greater risk in the WUI, and firefighters face more challenges. Local firefighters, many of them volunteer, are the first line of defense across most of the region.

We offer technical assistance, grants, and surplus equipment to States and to four multistate/Canadian Province *Forest Fire Compacts*. We also help during natural disasters and other nonwildfire emergencies in support of the Federal Emergency Management Agency. We stress:

- Prevention and, when wildfires strike, a strong, rapid response.
- Training, both in wildland firefighting and coordination during wildfires and other incidents.
- Treatments to reduce hazardous fuels in the WUI.
- Development of Community Wildfire Protection Plans.

Under U.S. and Canadian law, States and Provinces can share resources in times of high wildfire activity. The region's four multistate/Canadian Province Forest Fire Compacts save taxpayers money because individual States and Provinces need fewer permanent personnel and equipment. All 20 States belong to a Compact and are actively involved with mobilizations, training, and firefighter health and safety.

The Continental Wildfire, Beachwood, Ocean County, April 24, crowning as it burns toward Northern Boulevard. (NJFS)

***National Fire Plan*:**

- Reduced hazardous fuels on more than 117,491 acres near at-risk communities.
- Prepared 109 community protection plans, risk assessments, or equivalent plans.
- Offered 1,435 prevention and community education programs.
- Provided custom service to 2,569 communities. Activities included special training, enhanced water supplies for fire suppression in rural areas, and fire prevention programs in high-priority watersheds.

For example, in *Maryland*, specialists trained 180 agency staff in wildland firefighting. They treated 250 acres to reduce the threat of wildfire to high-risk communities. Equipment and training grants went to 28 volunteer fire departments. We distributed more than $627,686 in fire equipment under the Federal Excess Personal Property Program.

***State Fire Assistance*:** We distributed more than $8 million to train State forest fire staff, purchase wildland fire equipment, and upgrade automated weather stations that provide critical data for predicting fire risk and behavior.

***Volunteer Fire Assistance*:** This program serves communities with fewer than 10,000 people. In cooperation with States, we trained 10,570 volunteers, assisted 3,010 fire departments, and helped form three new fire departments. We also awarded $3.4 million in grants to 1,747 departments.

***Federal Excess Personal Property Program and Fire Fighter Equipment Program*:** We loaned $5.5 million in equipment to States and fire departments. We transferred ownership of $138 million in equipment to 11 States.

***Aviation Management*:** We completed safety inspections for all contract and State aircraft. No aviation accidents were reported.

***Air Force Liaison*:** We provide a staff liaison to the Air Force Wildland Fire Center. Funded by the Air Force and located at the Air Force Wildland Fire Center at Eglin Air Force Base, Florida, the liaison provides:

- Fire planning and risk mitigation services
- Wildland firefighter training, certification, and qualification tracking
- Support of fire operations through cooperative agreements
- Fire reporting, data management, and analysis

Springer's Brook Fire, Wharton State Forest, April 25. The left flank is crowning out. (SEAT Pilot Ed Carter of Downstown Aero.)

Continental Fire Incident Commander get's thanks for a job well done from some local residents. (NJFS)

Responding to Natural Disasters

The Northeastern Area staff responds to disasters that damage forests and trees. We aid States and communities immediately after the event, when assessing damage, and in long-term recovery. We encourage communities and landowners to prepare for natural disasters.

In the aftermath of Hurricane Sandy, the New Jersey Forest Service provided nearly $500,000 in Urban and Community Forestry funds to help communities remove hazardous trees and plant replacements. West Virginia helped Summersville and Elkins reduce hazards and restore damaged trees.

Hurricane Sandy made landfall near Atlantic City, NJ, in 2012. The storm damaged forests and community trees from Maine to West Virginia. The Disaster Relief Appropriations Act of 2013 authorized $1.8 million for technical assistance to affected landowners. We reimburse the States for serving these landowners. In some States, organizations such as Soil Conservation Districts are helping with the workload. New York, Connecticut, and New Jersey have their grants programs in place. New Hampshire will be up and running soon. The States and their partners have served 183 landowners and are working on 147 forest restoration projects.

Rockaway, NY, received some unexpected help from the NFL leading up to the Super Bowl. The NFL helped fund the *Million Trees Spring Tree Planting.* Sponsored by the New York Restoration Project and New York City Parks and Recreation with assistance from State staff, the event attracted 1,400 volunteers who helped plant more than 20,000 trees.

Joplin, MO, was hit by a severe tornado in 2011. They planted more than 3,900 trees in calendar year 2013. The city plans to hire its first full-time forester.

(USFS archives)

Objective: Managing and Enhancing Rural and Community Forests

The public depends on the actions of millions of individual landowners for critical benefits such as clean water and air, forest products, and outdoor recreation. A lack of sustainable management, loss of forest land, and other factors are threatening the capacity of our forests to provide vital services.

Improving Management in Priority Landscapes

Forest Stewardship Program

The number of forest landowners is rising, while the average parcel size is dropping. Fragmented forests provide fewer environmental benefits. We and our State partners focus on special areas such as large blocks of forest, or forests that protect drinking water or support forest-related jobs. Work in Important Forest Areas, also called State Priority Landscapes, helps States address issues in their State Forest Action Plans. States educate forest landowners and communities and help them plan for the sustainable management of their land.

In 2013, cooperators prepared 13,300 Forest Stewardship Plans covering more than 907,000 acres, a 32 percent increase over 2012. Nearly 50 percent of these acres are in priority areas.

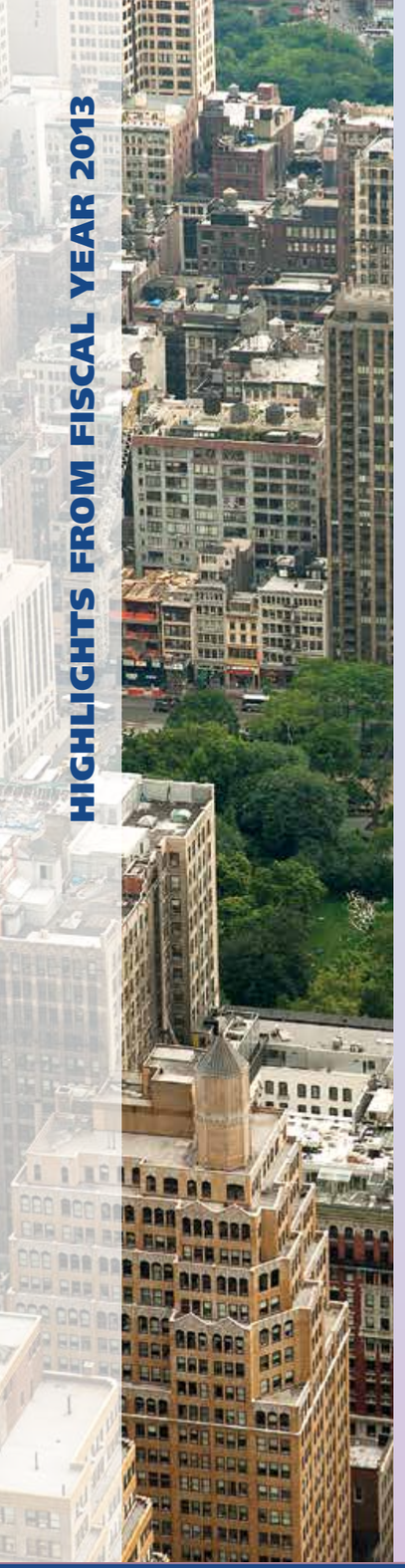
Monitoring confirms that 4.5 million acres in priority areas are being managed sustainably under a current Forest Stewardship Plan, a 12 percent increase over 2012. Here are a few Stewardship highlights from Fiscal Year 2013:

New Jersey: The Nation's most densely populated State shares the cost of developing a management plan with woodland landowners, which is spiking interest in forest management. The program has enrolled 1,625 stewardship landowners that collectively own more than 130,000 acres.

Vermont: The *Foresters for the Birds Project* developed best management practices for creating and maintaining critical habitat for woodland birds. Project personnel followed up with workshops for forest managers, landowners, and forest product operators. The project received the national *Wings Across the Americas* award from the Forest Service. Several other States are developing similar programs.

Call Before You Cut Hotline: Using funds from our Competitive Grants Program, several States have created a toll-free hotline so that landowners can receive unbiased technical advice from a service forester before harvesting their trees.

The Appalachian Forest Renewal Initiative will restore forests in the Appalachian coal mining region. More than 740,000 acres of nonforested, mined lands could be available for restoration. We are working with U.S. Forest Service Region 8 under a cooperative agreement with the National Fish and Wildlife Foundation. State Foresters and nongovernmental partners selected pilot projects in Ohio, Maryland, West Virginia, and several States outside our service area. Projects will begin in spring 2014.Improving Management in Priority Landscapes



Supporting Cooperation across Ownerships

We encourage landowners to work with their neighbors on shared goals to sustainably manage their land. By doing so, we are more likely to maintain large blocks of healthy, productive forest.

New Hampshire is modeling its *Stewardship Network – New England* after a successful Michigan project. It strengthens ties among natural resource organizations, agencies, and volunteers to meet landscape-scale management goals.

The ***Driftless Area Network Initiative***, a partnership of the Wisconsin Department of Natural Resources and the American Forest Foundation, revamped its outreach. More than 2,000 previously uninvolved forest landowners responded. Several States are starting similar efforts.

Volunteers plant trees in Buffalo, New York.

The ***Highlands Region*** of Connecticut, New Jersey, New York, and Pennsylvania is a forested oasis on the doorstep of a growing metropolitan area. Spanning 3.5 million acres, the region provides quality drinking water, recreation, and economic benefits to millions of residents and visitors. The following reflect our efforts in this region:

- *Continuing Conservation beyond Preservation*: In 2011, we invested $228,000 to develop forest stewardship projects at two of the most important forested tracts in the New Jersey Highlands. The National Forest Foundation matched the seed money. Work there is ongoing.
- *New Jersey Highlands Restoration Initiative on the South Branch of the Raritan River*: We are investing $95,000 in Forest Stewardship, Forest Health, and Urban and Community Forestry funds to return unproductive agricultural land to natural forests unique to the Highlands.

Growing More Livable Communities

In communities across our service area, storms, pests, neglect, and other factors are threatening forest resources. Improving the management and care of these resources and increasing the amount of tree cover in cities and towns would yield great environmental, social, and economic benefits.

Urban and Community Forestry Program

With our State forestry agency partners, we assisted 4,275 communities, serving two-thirds of the region's population. While a slight decline from last year, the number of communities that are managing their trees and forests grew to more than 1,600. Volunteers contributed more than 644,000 hours to projects.

In Fiscal Year 2013, State foresters awarded more than $2 million in Federal funds to communities in 614 cities and towns. This investment was matched by $12.3 million in State and local dollars.

First Downs for Trees: The Green Bay Packers football team kicked in the funds to plant more than 2,000 trees in Brown County, Wisconsin, communities. The trees will provide more than $9 million in benefits by reducing stormwater runoff and carbon dioxide, saving energy, improving air quality, and increasing property values.

Canopy Keepers, Washington, DC: The Urban Forestry Administration purchased thousands of watering bags to replace old watering tubs that needed transportation and maintenance. The new bags stay in place for the season. They are far more efficient and popular with volunteers caring for young trees.

Tree City USA program: Our service area boasts many outstanding programs:

- *Ohio* leads the Nation in the number of Tree City USA communities with 235. It also has 11 Tree Campus USA participants.
- *Illinois* ranks third in the Nation, with an economic impact of $81 million. It is first in the number of Tree Campuses and in communities given Growth Awards. Partnerships with Southern Illinois University and The Morton Arboretum allow the State to provide additional outreach.
- *New Jersey* has 174 Tree City USAs, ranking it fourth in the Nation. The State expects to break the 200-community mark in 2014.
- *New York State*, its Urban Forestry Council, and the Arbor Day Foundation urged students and college towns to work together toward Tree City and Tree Campus USA status. Jamestown, Cazenovia, Morrisville, Cortland, and Saranac Lake/Lake Placid gained recognition.

What's greener than a village green in Vermont? One that's being managed with respect for the past and an eye toward the future. The State Urban Forestry Program, Agency of Commerce and Community Development, and the University of Vermont documented the importance of village greens, past and present. Students inventoried and assessed the trees, did historical research, surveyed users, and developed landscape designs for eight communities.

Objective: Enhance Public Benefits from Forests

Forests and trees provide critical *ecosystem services* such as purifying water and air, cooling urban landscapes, storing carbon that contributes to greenhouse gases, and providing wood and other products. Fortunately, we can do much to protect and enhance these benefits.

Protecting and Improving Water Quality

Watershed Forestry Program

More than 52 million people across our service area drink water filtered by forests. Trees reduce the amount of pollutants and nutrients that reach waterways. We provide leadership and technical support for watershed restoration projects and programs.

The forested watersheds of Upstate New York supply more than a billion gallons of water per day to New York City's 9 million consumers.

New York City Watershed: The forested watersheds of Upstate New York supply more than a billion gallons of water per day to New York City's 9 million consumers. The Watershed Agricultural Council Forestry Program, with representatives from New York City, State agencies, landowners, foresters, loggers, and forest industries, guides projects. In Fiscal Year 2013, foresters helped landowners develop 81 new Forest Stewardship Plans covering more than 14,000 acres. The Program also delivered 14 workshops to 255 loggers and foresters.

Hydraulic fracturing allows the oil and gas industry to tap previously unreachable deposits. Several States in our service area, including some outside the Appalachian region, have significant natural gas/oil shale deposits. Many States will see the effects from pipelines, materials transport, or businesses that support these activities.

A U.S. Geological Survey Department of Energy report[3] cites environmental concerns that include water use, groundwater contamination from stray gas or waste, and the effects of infrastructure such as roads. We briefed our agency staff, Appalachian State Foresters, Forest Service Region 8 and 9 staffs, and the Northeastern Area Association of State Foresters Utilization Committee. We also provided technical assistance to the Delaware River Basin Commission, U.S. Geological Survey, and other groups.

Tullibee lakes are home to lake herring, also called tullibee, which are an important food for game fish. To protect these waters, the Minnesota Division of Forestry and the Minnesota Forest Resources Council are jointly taking a "lakeshed" approach to helping landowners. Their goal is to place 75 percent or more of the forest in a "lakeshed" into sustainable management.

Chesapeake Bay Program: We provide assistance and coordination across States to carry out forest practices for watershed restoration. We also quantify and communicate the benefits of forest practices. Policymakers are in the midst of the most complex Total Maximum Daily Load (TMDL), or "pollution diet," ever. The multistate TMDL will reduce nutrients and sediment across 44 million acres, 80 percent of which are privately owned.

The Northeastern Area:

- Contributed to the restoration of 202 miles of riparian buffers (lands along waterways) in Fiscal Year 2013, bringing the total to 7,727 miles of restored buffers since 1996.
- Completed a Draft Working Land Conservation Strategy for the Chesapeake region with the Natural Resources Conservation Service and other partners.
- Completed a detailed Riparian Forest Buffer Status Paper to highlight the importance of this practice to the Chesapeake watershed.

Bald eagles nest near the Delaware River in northeastern Pennsylvania.

The ***Great Lakes Restoration Initiative*** (***GLRI***) is a 5-year Presidential initiative to protect and restore water quality and ecosystems in the Great Lakes region. The U.S. Environmental Protection Agency distributes funds to Federal, State, and local agencies; tribes; and nongovernmental organizations. We receive funds to restore and expand tree cover, restore forests lost to emerald ash borer, reclaim brownfields, control invasive plants, and promote the benefits of trees to water quality. In Fiscal Year 2013 we distributed $3.1 million in 17 competitive grants. More than 70,000 trees will be planted and 430 acres of brownfield sites treated.

3 Water resources and shale gas/oil production in the Appalachian Basin—critical issues and evolving developments. August 2013. OFR 2013-1137. 12 p.

The ***Urban Waters Federal Partnership*** unites 13 Federal agencies working to improve urban waterways, especially where waters are in poor condition or the community is economically distressed. We assist nine partnerships: the Anacostia River Watershed in Maryland and the District of Columbia; the Bronx and Harlem River Watersheds in New York City; the Grand River in Grand Rapids, MI; the Middle Blue River in Kansas City, MO; the Mystic River in Boston; the Patapsco Watershed in Baltimore; and the Northwest Indiana Area.

In *northwest Indiana*, for example, partners are focusing on four watersheds—Trail Creek, East Branch of Little Calumet and Salt Creek, Deep River, and the Grand Calumet. Because the area was hard hit by emerald ash borer, many projects involve restoration planting. Munster has 95 new trees, while Valparaiso planted 105 trees around a stormwater detention pond.

Strengthening Forest-related Businesses and Local Economies

Forest-related businesses are battling global competition and high energy costs. From major corporations to small family-owned companies, they employ 400,000 people in the Northeast and Midwest—roughly 40 percent of all U.S. jobs in these sectors. In addition, many landowners need income from the sale of forest products to actively manage their forests.

The Wood Education and Resource Center (WERC)

Located in Princeton, WV, WERC promotes efficient wood processing, the use of pest-damaged timber, green building, and wood-based energy. We offer technical expertise; specialized training; and information to businesses, States, and other partners across a 35-state, hardwood-rich area. In Fiscal Year 2013, WERC:

- Provided more than 25 industry-related workshops, training sessions, Webinars, and Webcasts.
- Allocated $167,000 to four new or existing grants and agreements.
- Added information to its Web site about using woody biomass for heat and power.

Sawing short logs. Stephen Bratkovich; USDA Forest Service; Bugwood.org

Purdue University is developing and commercializing an x-ray scanner for hardwood logs. Mill workers can "see" inside the log, allowing them to cut the log for the best yield.

Using Forest Products, Biomass, and Ecosystem Service Markets to Mitigate Greenhouse Gases

Trees and forests offer vital ecosystem services. Wood is easy to value, but how do we place a value on clean water and pure air? Governments and private entities are starting to offer incentives for landowners to voluntarily participate in open, fair ecosystem markets that pay them for enhancing forest benefits. We distributed $1.42 million in 30 competitive grants for ecosystem market-related projects during Fiscal Year 2013. Our activities span several programs. For example:

Forest ReLeaf of Missouri: Urban and Community Forestry funds supported a project to analyze tree cover in St. Louis and 90 surrounding communities. Results showed an overall tree cover of just 18 percent, which is providing ecosystem services worth $41 million. The city has the potential for 52 percent tree cover. Trees cover 42 percent of the county's other communities, which could be increased by 26 percent. A community workshop explained project results and how to increase tree cover.

Fox River Phosphorus Trading Project: Announced in 2013, the project will cut nutrients and algae blooms in Wisconsin's Lower Fox River Watershed, which feeds into Green Bay. Coupled with voluntary projects, the market will improve impaired waters and help delist the Fox River/Lower Green Bay Area of Concern. The project is a partnership between the Great Lakes Commission and the USDA Natural Resources Conservation Service. We serve on the Advisory Group.

The WERC Wood Energy Technical Assistance Team: Due to a shortage of expertise in the private sector, this team has prepared more than 120 prefeasibility studies for facilities considering a switch to woody biomass for energy. Conversions generate significant savings and cut the use of fossil fuels.

WERC is helping the District of Columbia and its contractors develop a district energy project to serve Ballou High School and several community facilities in the Anacostia section. The team is also providing preliminary design information for the wood energy system and will help the city government develop its supply chain.

The Wood Education and Resource Center
Wood Energy Technical Assistance Team

Technical Assistance in Fiscal Year 2013

State	Projects	Highlights
Connecticut	1	Coventry School Committee
Delaware	1	Statewide biomass availability analysis
District of Columbia	1	Public buildings in the Anacostia section
Indiana	1	Statewide analysis, potential for biomass energy conversions
Maine	4	Prefeasibility for Eastport, Houlton, Gardiner, and Farmington
Maryland	2	Baltimore County and Montgomery County
Massachusetts	10	Narragansett High School, Harvard Forest, and others
Minnesota	1	Multiple buildings in the community of Ely
New Hampshire	7	Rockingham and Grafton County buildings, and others
New York	10	NY Power Authority, State buildings in the Adirondacks, and others
Pennsylvania	10	Several schools, Warren State Hospital, and others
West Virginia	1	J.C. Hamer Company sawmill

Using Wood from Pest- or Storm-damaged Trees: Dead urban and suburban trees have historically been hauled to landfills. With assistance from WERC, the Southeast Michigan Resource Conservation and Development Council, Illinois Emerald Ash Borer Wood Utilization Team, and others are finding innovative ways to harvest and use the wood. Their work includes demonstrations, training, and feasibility assessments. WERC hosts quarterly Webcasts in partnership with these organizations.

Improving the Effectiveness of our Organization

We believe that *how* we operate is critical to our success. This depends upon the partnerships that we build, the skill and commitment of our employees, and the way we manage the business of our organization.

Grants and Agreements

We processed, awarded, and monitored 273 projects worth $68.9 million for our State and private partners. This included the receipt, evaluation, and award decisions for $3.7 million in Redesign proposals and $3.1 million in Great Lakes Restoration Initiative (GLRI) proposals. We receive GLRI funds from the U.S. Environmental Protection Agency.

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Technology Transfer and Direct Technical Assistance

We bring technology, the latest research, and the newest science to natural resource professionals. Besides direct program assistance, we offer other services that benefit our entire service area.

Office of Knowledge Management (OKM)

OKM provides GIS services and information databases for in-house and partner use. We maintain the Northeastern Area's Web and Intranet sites and provide reliable sources for science-based information. We also offer strategic planning and sustainability planning services, both in-house and to the States.

Stewardship Mapping and Reporting Tool (SMART): SMART is a Web-based data entry tool that helps users develop Forest Stewardship Plans. With a database that includes spatial information, users can view plan boundaries on maps of State or other geographic locations as well as on priority landscapes. All of the States in our service area entered their Fiscal Year 2013 Stewardship Plan data into the national database.

Several States are adapting SMART for their own uses. Delaware is using it to track and report plans written by other agencies or private natural resource specialists. Michigan hosted workshops for private forestry consultants, emphasizing SMART's plan writing and tracking capabilities.

The Historical Fire Occurrence Database involves the National Association of State Foresters, U.S. Forest Service, and the primary wildland fire agencies in each State. The project, now national in scope, began in the Northeastern Area. The database will eventually house at least a decade of standardized wildland fire records for each State. More than 677,000 records have been uploaded. The information will aid policy makers and allow users to spot trends.

Redesign and the Competitive Allocation Process

The U.S. Forest Service State and Private Forestry and the National Association of State Foresters launched the Redesign initiative in 2008 to promote innovation and focus investments where they will make the greatest difference. The Competitive Allocation Request for Proposals (CARP) is the Northeastern Area's funding strategy under Redesign. We award grants on a competitive basis, which allows us to direct a greater portion of funds to critical needs, especially those in State Forest Action Plans. Under CARP, grantees can apply under one program or a combination of authorities under several programs. This allows grantees to better address real-world issues. CARP also streamlines the application and review process. A Review Team of State Foresters and Northeastern Area leaders rank proposals against a set of criteria. The total value of Fiscal Year 2013 Competitive Grant projects was $17.5 million.

Competitive Allocation Projects Awarded, Fiscal Year 2013			
Category	**Proposals Funded**	**Funds Awarded (million)**	**Matching Funds from Partners and Cooperators (million)**
Hazard Mitigation, Wildfire	8	$2.2	$2.1
Redesign	22	$3.7	$4.1
Great Lakes Restoration Initiative *	16	$3.1	$2.3
Total	**46**	**$9.0**	**$8.5**

*Great Lakes Restoration Initiative funds come from the U.S. Environmental Protection Agency

Examples of CARP projects include:

- ***Indiana***: *Keep Indianapolis Beautiful* connected with Eli Lilly and Company's Annual Service Day. Several thousand employees and local youth removed invasive species on 5 acres and planted 621 native trees to help with stormwater management. The company also donated $500,000 for the work.
- ***Connecticut***: *StormWise* focuses on the relationship between trees and power lines. Supported by local electric utilities and a grant from the U.S. Forest Service, *StormWise* is a multipartner, statewide initiative to reduce conflicts between trees and power lines.
- ***Missouri***: The Department of Conservation is helping the cities of Clinton, Parkville, and Saint Joseph with tree inventories to find emerald ash borer infestations. The insect was recently found in Parkville. They are also helping the city of Clinton with management planning.

Communicating with the Public and Natural Resource Professionals

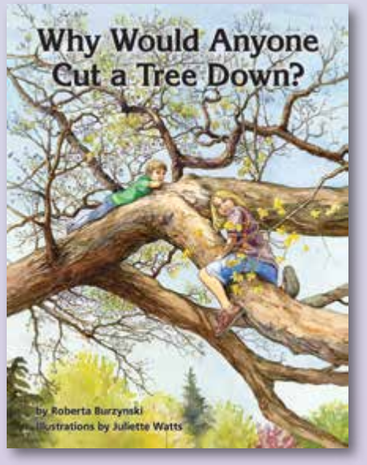
We work to make our forestry information accessible and understandable to the public. We also produce scientific publications and materials for professional audiences. Through our Conservation Education Program, we support educational programs for youth and educators.

Office of Communications

Our modern lifestyles, even in rural areas, tend to disconnect people from nature. Crafting sound natural resource policies requires a knowledgeable public that understands the critical role forests play in our lives.

Four Northeastern Area publications are currently on the Government Printing Office bestseller list. In fact, we have more publications on their historical bestseller list than any other unit of the Forest Service.

Our newest bestseller is called *Why Would Anyone Cut a Tree Down?* This 41-page children's book for early elementary grade students, parents, and educators features 28 full-color illustrations. It was written and illustrated by two longtime Northeastern Area employees.



Appendix

Table 1. Selected Accomplishments, Fiscal Year 2013

Selected Accomplishments for Northeastern Area State and Private Forestry Fiscal Year 2013	Results
Forest Legacy Program	
Number of tracts protected	14
Acres protected	50,283
Acres protected by Forest Legacy Program (total for all years)	1.61 million
Forest Health Program	
Acres treated for insects or diseases[1]	468,000
Acres surveyed and/or monitored	220 million
Cooperative Fire Program	
National Fire Plan	
Hazardous acres treated, prescribed fire	115,191
Hazardous acres treated mechanically	2,300
Community Protection Plans	109
Firefighters trained	10,570
Volunteer assistance grants to small communities	1,747
Community education programs	1,435
Communities assisted, miscellaneous training, and activities	2,569
Forest Stewardship Program	
Technical assists to landowners	47,638
Landowners receiving educational services	64,879
New or revised Stewardship Plans	13,314
Acres in new or revised Stewardship Plans	907,717
Percentage of new acres on priority lands	56.5
Acres under Stewardship Plans (all years)	9.9 million
Urban and Community Forestry	
Communities with management plans	3,117
People living in communities assisted	81.4 million
Urban Forestry Program cost per capita in communities assisted	$0.08
Volunteer hours contributed	644,718
Wood Education and Resource Center	
Number of projects funded	3
Value of funded projects	$167,206

[1] Primarily gypsy moth; also includes hemlock woolly adelgid and emerald ash borer, oak wilt, and invasive plants

Table 2. Budget Summary, Fiscal Years 2011, 2012, and 2013

Budget Summary of State and Private Forestry Programs for the Northeastern Area Fiscal Years 2011, 2012, 2013 ($ in thousands)	FY 2011	FY 2012	FY 2013
Forest Health Management			
Forest Health Management – Federal Lands	11,862	10,200	9,279
Forest Health Management – Cooperative Lands	16,567	12,646	12,385
Subtotal Forest Health	**28,429**	**22,846**	**21,664**
Cooperative Fire Protection			
State Fire Assistance	6,573	5,532	5,699
Volunteer Fire Assistance	2,578	2,574	2,439
National Fire Plan	14,771	11,138	9,452
Subtotal Fire	**23,922**	**19,244**	**17,590**
Cooperative Forestry			
Forest Stewardship	9,682	9,274	12,083
Urban and Community Forestry	10,655	10,890	9,707
Forest Legacy	27,153	17,436	18,663
Economic Action Programs	410	0	0
Subtotal Cooperative Forestry	**47,900**	**37,600**	**40,453**
Other			
Forest Health Technology Enterprise Team	2,389	2,518	2,445
Reimbursables	6,631	5,408	4,744
Subtotal Other	**9,020**	**7,926**	**7,189**
Total All Programs	**109,271**	**87,616**	**86,896**